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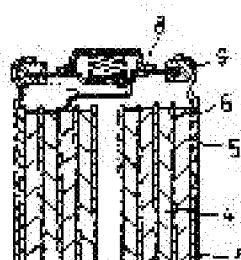
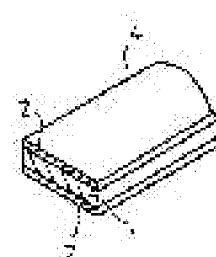
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(54) NONAQUEOUS SECONDARY BATTERY

(57)Abstract:

PURPOSE: To obtain a negative electrode in which dendritic growth of lithium is retarded and which is easily formed in a thin sheet by using a negative electrode obtained by placing metal easily alloyed with lithium between lithium plates.

CONSTITUTION: A negative electrode 4 is formed by placing, for example, a 0.2mm thick aluminium plate 1 between a pair of 0.1mm thick lithium plates 2 and by press-bonding them. The negative electrode 4 and a positive electrode 5 are spirally wound with a separator 6 made of polypropylene nonwoven fabric interposed to form a wound electrode, then the wound electrode is accommodated in an outer can 7 which also serves as a



negative terminal. The negative electrode 4 is connected to the outer can 7 through a lead plate 10, and the positive electrode 5 to a cap 8 through a lead plate 11. By this construction, the thin sheet negative electrode 4 is formed in the wound electrode, and in addition, lithium alloy is formed on the connection surface of lithium plate 2 with the metal 1 capable of alloying lithium. Therefore, dendritic growth of lithium is retarded and performance on charge-discharge cycles can be remarkably improved.

